



METROPOLITAN
TRANSPORTATION
COMMISSION

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BAY BRIDGE DESIGN TASK FORCE
Wednesday, June 10, 1998

1 p.m.

Joseph P. Bort MetroCenter Auditorium
101 Eighth Street
Oakland, California 94607

Chairperson: Mary King

Members: Sharon Brown
Mark DeSaulnier
Elihu Harris
Tom Hsieh
Jon Rubin
Angelo Siracusa

Staff Liaison: Steve Heminger

FINAL AGENDA

1. Welcome and introductions - Mary King, Chairperson
2. Presentation of bridge design recommendations by Engineering and Design Advisory Panel* - Joe Nicoletti, Chair and John Kriken, Vice Chair
3. Other business/public comment

* Attachment sent to members, key staff, and others as appropriate. Copies available at meeting.

Public Comment: The public is encouraged to comment on agenda items at committee meetings by completing a request-to-speak card (available from staff) and passing it to the committee secretary or chairperson. Public comment may be limited by any of the procedures set forth in Section 3.09 of MTC's Procedures Manual (Resolution No. 1058, Revised) if, in the chair's judgment, it is necessary to maintain the orderly flow of business.

Record of Meeting: MTC meetings are tape recorded. Copies of recordings are available at nominal charge, or recordings may be listened to at MTC offices by appointment.

Sign Language Interpreter or Reader: If requested three (3) working days in advance, sign language interpreter or reader will be provided; for information on getting written materials in alternate formats call 510/464-7787.

Transit Access to MTC: BART to Lake Merritt Station. AC Transit buses: #11 from Piedmont or Montclair; #59A from Montclair; #62 from East or West Oakland; #35X from Alameda; #36X from Hayward.

Parking at MTC: Metered parking is available on the street. No public parking is provided.

436 ALVARADO STREET, SAN FRANCISCO, CALIFORNIA 94114
415-648-5457

9 June 1998

To: Members of the Metropolitan Transportation Commission's Bay Bridge Design Task Force

Re: Bay Bridge East Span: Form in place, Function ignored

Dear Commissioners,

I am very concerned that the economic and environmental health and future of our region are being compromised by unprofessionally short-sighted design of the new Bay Bridge East Span. The primary function of the bridge is to transport people and goods around and within our region as efficiently and as rapidly as possible, yet the goal of maximizing such movement seems to have been ignored by MTC and Caltrans staff in their consistent failure to follow the Task Force's Recommendation 8 and realistically plan for future rail service on the bridge.

The existing eastern and western spans of the Bay Bridge were designed to carry the electric trains of the Southern Pacific, Key System, and Inland Empire Railroads. These were "heavy rail" operations, with typical trains made of seven 110-foot, 140,000-pound vehicles. These trains operated at intervals of little more than one minute (over twice as frequently as BART) and delivered their passengers to the Transbay Transit Terminal in San Francisco. The terminal itself, with its six-train capacity, multiple platforms, and multiple pedestrian ramps, was designed for passenger flows of over 50,000 passengers per hour. The passenger-carrying capacity of the two rail tracks across the bridge was greater than the present-day bridge and the future-upgraded BART tube *combined*. (Despite the assertions of some MTC/BART staffers, transbay tube capacity is ultimately limited by passenger capacity at the two-track BART stations, and cannot be exceeded no matter how much is spent on new signalling and train-control systems.)

Modern, high-speed intercity rail passenger services, of a type which will one day link the major centers of California, have weights and sizes (400 ton trains, with 17 metric ton per axle loadings) comparable to the trains which formerly ran on the bridge. Such high-speed services could link San Francisco, Oakland and Sacramento across the *existing* bridge, but could not run across the second-rate east span structure which is

proposed.

In contrast, "light-rail" systems of the type operating in San Francisco's Metro subway have trains of four 80-foot, 80,000-pound vehicles and carry around 15,000 passengers per hour.

Yet at a time when regional traffic congestion has reached chronic levels, when the existing ten-lane motor-vehicle-only Bay Bridge is at capacity, when the BART system is at or beyond peak capacity, and when MTC's own projections predict exacerbation of these problems as millions of new residents settle in the area, MTC staff is recommending construction of an East Span which can only accommodate lower-capacity light rail and is simultaneously recommending destruction of the Transbay (rail) Terminal needed for future rail services. Task Force members should not need reminding that MTC staff initially recommended against all provision for future rail and HOV capacity on the bridge and were overridden by vote of the Task Force. It appears staff is not following the directives of the Task Force and Commission except in the most literal and reluctant fashion.

Caltrans staff, entrusted with designing a new span to accommodate future rail services, have also redefined the task to one of "carrying light rail service across the east span only." Presentations from Caltrans staff have begun with statements that they have explicitly failed to study how rails from the East Span would even pass through Yerba Buena Island and onto the West Span, let alone where they would terminate in San Francisco and how they would pass through the Oakland bridge approaches.

I do not believe it was the intention of the Task Force to create a low-capacity train shuttle between the East Bay Toll Plaza and the edge of Yerba Buena island, and I do not think the interests of our region will be served by such short-sighted mis-design.

The Bay Bridge is the vital link between the San Francisco Peninsula and the East Bay. The retrofit and replacement programs being undertaken represent billions of dollars of public expenditure in a facility designed to last for a hundred years. Given the capacity problems we are already experiencing, given the immense expenses associated with the project, and given the unlikelihood that additional bay crossings will be contemplated or built in our lifetimes, we must make the very best use of the transportation facilities we already have and to build new facilities in the wisest, most flexible and most

forward-thinking fashion.

The ten-lane, motor-vehicle-only freeway crossing of the bay which Caltrans and MTC staff is proposing is not such a design. It will create a weak link in the entire regional transportation network by limiting traffic flow to 10,000 or so *vehicles* per hour, rather than allowing the real measure, which is *passengers* carried per hour, to be maximized by use of rail vehicles.

I urge you to direct your staff and to direct Caltrans to construct a new East Span which has at least the passenger and goods carrying capacity of the existing Bridge spans, and to direct them also to prepare realistic studies of how rail service of a capacity and loading at least equal to that formerly carried by the Bridge will be accommodated on the Bridge in future and, most importantly, to ensure that no structural or other engineering decisions are made which would conflict with such future rail use. It takes only one badly placed support column to turn a straightforward retrofit program into an infeasible, multi-billion nightmare.

We must look forward and build a structure for the twenty-first century and beyond, not a myopic 1960's-style freeway which will be at capacity and obsolete the day it is opened.

Very truly yours,

A handwritten signature in black ink, appearing to read "R. Mlynarik", written in a cursive style.

Richard Mlynarik



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NEWS RELEASE

Contact: Marjorie Blackwell, 510/464-7884
Réka Goode, 510/464-7706

Deadline Near for MTC's Bay Bridge Design Process

Oakland, CA, June 8, 1998. . . As the Metropolitan Transportation Commission's year-long effort to achieve regional consensus on the design and other features of a new eastern span of the San Francisco-Oakland Bay Bridge approaches the July 1 deadline, three meetings have been scheduled for the final month. Each will be held at **1 p.m. in the MetroCenter Auditorium, 101 Eighth Street, Oakland** (across from the Lake Merritt BART station).

- **Wednesday, June 10**

Who: MTC's Bay Bridge Design Task Force

What: Presentation of recommendations from the Engineering and Design Advisory Panel on the preferred design of the main span crossing the channel adjacent to Yerba Buena Island — a single-tower, self-anchored suspension span. The meeting also includes a public hearing on the main-span design and related bridge issues, such as bicycle/pedestrian access on the new span.

- **Monday, June 22**

Who: MTC's Bay Bridge Design Task Force

What: Vote on recommendations for the design of the main span, the option of having a bicycle/pedestrian path, and the future of the Transbay Transit Terminal in San Francisco.

- **Wednesday, June 24**

Who: MTC, acting in its role as the Bay Area Toll Authority

What: Vote on recommendations of the Bay Bridge Design Task Force.

Public comment on bridge design issues may be submitted to MTC up until 5 p.m. on Friday, June 12. Send letters to: Mary King, Chair, Bay Bridge Design Task Force, 101 Eighth Street, Oakland, CA 94607; telephone: TravInfo™, 817-1717 (no area code) and press option 7; fax: 510/464-7848; e-mail: info@mtc.ca.gov. Bridge designs can be viewed on MTC's Web site: www.mtc.ca.gov.

BILL NUMBER: SB 60 BILL TEXT

PROPOSED CONFERENCE REPORT AUGUST 8, 1997

CONFERENCE REPORT NO. 1

INTRODUCED BY Senator Kopp DECEMBER 6, 1996

An act to repeal Section 8879.4 of the Government Code, and to amend Sections 180.7 and 30796.7 of, to add Sections 188.5, 188.10, 188.14, 30604.5, 30685, and 30796.9 to, to add Chapter 4.5 (commencing with Section 31000) to Division 17 of, and to repeal Section 31010 of, the Streets and Highways Code, relating to transportation, and making an appropriation therefor.

LEGISLATIVE COUNSEL'S DIGEST

SB 60, as amended, Kopp. Transportation: funding

- (1) Existing law provides alternative procedures for specified highway seismic retrofit work, including an exemption from the California Environmental Quality Act. This exemption is to be repealed on June 30, 2001, or on the date the Director of Finance certifies to the Chair of the Joint Legislative Budget Committee that the proceeds of the Seismic Retrofit Bond Act of 1996 have been fully expended, whichever is sooner. This bill would extend that repeal date until the date the Director of Transportation certifies to the Secretary of Business, Transportation and Housing that all construction activities for the seismic retrofit of all state-owned toll bridges is complete, or June 30, 2005, whichever occurs first.
- (2) Existing law provides that the Department of Transportation shall only use funds in the 1996 Seismic Retrofit Account in the Seismic Retrofit Bond Fund of 1996 for seismic retrofit of state-owned toll bridges and bridges in the second phase of that process and that no other state funds, including toll revenues or funds in the State Highway Account, may be used for those purposes. This bill would repeal those provisions and require that other additional funds be used for that seismic retrofit, as prescribed.
- (3) Existing law requires the Department of Transportation to maintain the San Francisco-Oakland Bay Bridge as a primary state highway and to cause the bridge to comply at all times with all lawful orders of any governmental agency or authority having jurisdiction thereof. This bill would prohibit local and state permitting authorities from imposing any requirement that a bicycle, pedestrian, or mass transit facility be constructed on the bridge as a condition for issuing any permit, granting any easement, or granting any other form of approval needed, for the construction of a new bridge.
- (4) Existing law authorizes the San Diego Association of Governments to impose a toll on vehicles crossing the San Diego-Coronado Bridge, with a requirement that the revenues generated thereby be used for specified purposes, including the payment of maintenance costs. This bill would require the association to deposit \$33,000,000 in the Toll Bridge Seismic Retrofit Account, as described under (5), and to submit to the Legislature and the department a prescribed financial plan on or before January 1, 1998, thereby imposing a state-mandated local program. The bill would require the maintenance of the bridge to be funded by the state pursuant to a specified provision of law.
- (5) Existing law requires the Department of Transportation to collect tolls on state-owned toll bridges. This bill would, until a specified date, impose a seismic retrofit surcharge equal to \$1 per vehicle for passage on the state-owned toll bridges in the region within the area of the jurisdiction of the Metropolitan Transportation Commission, except for vehicles that are authorized toll-free passage on those bridges.

The bill would require that revenue generated from the surcharge be deposited in the Toll Bridge Seismic Retrofit Account, which the bill would create in the State Transportation Fund, and which would be continuously appropriated without regard to fiscal years to the Department of Transportation for the purpose of funding seismic retrofit of currently listed bridges. The bill would thereby make an appropriation. The bill would authorize the department to transfer or loan, or both, funds between the account and the State Highway Account for cash flow purposes to accomplish individual toll bridge seismic retrofit requirements.

SENATE BILL 60

The bill would require the department to determine the date when (a) sufficient funds have been generated for the completion of seismic retrofit and the replacement of the San Francisco-Oakland Bay Bridge, as specified, and (b) sufficient funds have been generated to pay for any costs added under a specified provision relating to the San Francisco-Oakland Bay Bridge. The bill would require the department to notify the Secretary of State of that date, immediately upon making that determination.

- (6) The bill would appropriate \$200,000,000 from the State Highway Account in the State Transportation Fund to the Department of Transportation for the purposes of a prescribed state-local partnership program for expenditure in the 1998-99 fiscal year, of which amount \$250,000 would be required to be allocated to counties, as prescribed.
- (7) The bill would set forth specific legislative findings and declarations.
- (8) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement, including the creation of a State Mandates Claims Fund to pay the costs of mandates that do not exceed \$1,000,000 statewide and other procedures for claims whose statewide costs exceed \$1,000,000. This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to these statutory provisions.

Vote: majority. Appropriation: yes . Fiscal committee: ~~no~~ yes . State-mandated local program: ~~no~~ yes .

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 8879.4 of the Government Code is repealed.

SECTION. 2. Section 180.7 of the Streets and Highways Code is amended to read:

180.7. This article shall remain in effect only until the date the Director of Transportation certifies to the Secretary of Business, Transportation and Housing that all construction activities for the seismic retrofit or replacement of all state-owned toll bridges is complete, or June 30, 2005, whichever occurs first, and as of that date is repealed.

SECTION 3. Section 188.5 is added to the Streets and Highways Code, to read:

188.5. (a) The Legislature finds and declares all of the following:

- .. (1) The department has determined that in order to provide maximum safety for the traveling public and to ensure continuous and unimpeded operation of the state's transportation network, six state-owned toll bridges are in need of a seismic safety retrofit, and one state-owned toll bridge is in need of a partial retrofit and a partial replacement.
- .. (2) The bridges identified by the department as needing seismic retrofit are the Benicia-Martinez Bridge, the Carquinez Bridge, the Richmond-San Rafael Bridge, the San Mateo-Hayward Bridge, the San Pedro-Terminal Island Bridge (also known as the Vincent Thomas Bridge), the San Diego-Coronado Bridge, and the west span of the San Francisco-Oakland Bay Bridge. The department has also identified the east span of the San Francisco-Oakland Bay Bridge as needing to be replaced. That replacement span will be safer, stronger, longer-lasting, and more cost-efficient to maintain than completing a seismic retrofit for the current east span.
- .. (3) The south span of the Carquinez Bridge is to be replaced pursuant to Regional Measure 1, as described in subdivision (b) of Section 30917.
- .. (4) The cost estimate to retrofit the state-owned toll bridges and to replace the east span of the San Francisco-Oakland Bay Bridge is two billion six hundred twenty million dollars (\$2,620,000,000), eighty million dollars (\$80,000,000) of which is for cable suspension pursuant to paragraph (1) of subdivision (b) of Section 31000, as follows:

SENATE BILL 60

- (A) The Benicia-Martinez Bridge retrofit is one hundred one million dollars \$101,000,000.
- (B) The north span of the Carquinez retrofit is eighty-three million dollars \$ 83,000,000.
- (C) The Richmond-San Rafael Bridge retrofit is three hundred twenty-nine million dollars \$329,000,000.
- (D) The San Mateo-Hayward Bridge retrofit is one hundred twenty-seven million dollars \$127,000,000.
- (E) The San Pedro-Terminal Island Bridge retrofit is forty-five million dollars \$450,000,000.
- (F) The San Diego-Coronado Bridge retrofit is ninety-five million dollars \$ 95,000,000.
- (G) The west span of the Bay Bridge retrofit, as a lifeline bridge,
is five hundred fifty-three million dollars \$553,000,000.
- (H) Replacement of the east span of the Bay Bridge is
one billion two hundred eighty-five million dollars \$1,285,000,000.
which includes eighty million dollars \$80,000,000 for cable suspension.

(b) It is the intent of the Legislature that the following amounts from the following funds shall be allocated through the 2004-05 fiscal year, for the seismic retrofit or replacement of state-owned toll bridges:

(1) Six hundred fifty million dollars (\$650,000,000) from the 1996 Seismic Retrofit Account in the Seismic Retrofit Bond Fund of 1996 for the seven state-owned toll bridges identified by the department as requiring seismic safety retrofit or replacement.

(2) One hundred forty million dollars (\$140,000,000) in surplus revenues generated under the Seismic Retrofit Bond Act of 1996 that are in excess of the amount actually necessary to complete Phase Two of the state's seismic retrofit program. These excess funds shall be reallocated to assist in financing seismic retrofit of the state-owned toll bridges.

(3) Fifteen million dollars (\$15,000,000) from the Vincent Thomas Toll Bridge Revenue Account.

(4) Nine hundred seven million dollars (\$907,000,000), which includes eighty million dollars (\$80,000,000) for cable suspension, from the seismic retrofit surcharge imposed pursuant to Section 31010.

(5) Thirty-three million dollars (\$33,000,000) from the San Diego-Coronado Toll Bridge Revenue Fund.

(6) Not less than seven hundred forty-five million dollars (\$745,000,000) from the State Highway Account, to be achieved as follows:

(A) (i) Two hundred million dollars (\$200,000,000) to be appropriated for the state-local transportation partnership program described in paragraph (7) of subdivision (d) of Section 164 for the 1998-99 fiscal year.

(ii) The remaining funds intended for that program and any program savings to be made available for toll bridge seismic retrofit.

(B) A reduction of not more than seventy-five million dollars (\$75,000,000) in the funding level specified in paragraph (4) of subdivision (d) of Section 164 for traffic system management.

(C) Three hundred million dollars (\$300,000,000) in accumulated savings by the department achieved from better efficiency and lower costs.

(7) Not more than one hundred thirty million dollars (\$130,000,000) from the transit capital improvement program funded by the Transportation Planning and Development Account in the State Transportation Fund. If the contribution in subparagraph (A) of paragraph (6) exceeds three hundred seventy million dollars (\$370,000,000), it is the intent that the amount from the transit capital improvement program shall be reduced by an amount that is equal to that excess.

(8) The estimated cost of replacing the San Francisco-Oakland Bay Bridge listed in subparagraph (H) of paragraph (4) of subdivision (a) is based on the following assumptions:

(a) The new bridge will be located north adjacent to the existing bridge.

SENATE BILL 60

- (b) The main span of the bridge will be in the form of a single tower cable suspension design.
- (c) The roadway in each direction will consist of five lanes, each lane will be 12 feet wide, and there will be 10-foot shoulders as an emergency lane for public safety purposes on each side of the main-traveled way.
- (1) If the actual cost of retrofit or replacement, or both retrofit and replacement, of toll bridges is less than the cost estimate of two billion six hundred twenty million dollars (\$2,620,000,000), there shall be a proportional reduction in the amount provided in paragraphs (3), (4), and (5) of subdivision (b) equal to one-half of the difference between the cost estimate and the actual cost, and there shall be an equal reduction in the amount specified in paragraph (6) of subdivision (b).
- (2) If the department determines that the actual cost of retrofit or replacement, or both retrofit and replacement, of toll bridges exceeds two billion six hundred twenty million dollars (\$2,620,000,000), which includes eighty million dollars (\$80,000,000) for cable suspension, the department shall report to the Legislature within 60 days from the date of that determination as to the reason for the increase in cost and shall propose a financial plan to pay for that increase and the Legislature shall thereafter adopt a financial plan therefor.
- (d) Annually and upon completion of the seismic retrofit of the state-owned toll bridges, the department shall report to the Legislature and the Governor as to the amount of funds used for that purpose from each source specified in subdivision (b) and submit an updated cost estimate.
- (e) Notwithstanding any other provision of law, the commission shall adopt fund estimates consistent with subdivision (b) and reserve funds in the fund estimate to match federal funds for the congestion mitigation and air quality program and the surface transportation program made available to regional planning agencies.

SECTION. 4. Section 188.10 is added to the Streets and Highways Code, to read:

188.10. The Toll Bridge Seismic Retrofit Account is hereby created in the State Transportation Fund. The money in the account is hereby appropriated, without regard to fiscal years, to the department for the purpose of funding seismic retrofit or replacement of the bridges listed in Section 188.5.

SECTION. 5. Section 188.14 is added to the Streets and Highways Code, to read:

188.14 The department may transfer or loan, or both, funds between the Toll Bridge Seismic Retrofit Account in the State Transportation Fund and the State Highway Account for cash flow purposes to accomplish individual toll bridge seismic requirements.

SECTION. 6. Section 30604.5 is added to the Streets and Highways Code, to read:

30604.5. Notwithstanding any other provision of law, local and state permitting authorities shall not impose any requirement that a bicycle, pedestrian, or mass transit facility be constructed on the San Francisco-Oakland Bay Bridge as a condition for issuing any permit, granting any easement, or granting any other form of approval needed, for the construction of a new bridge.

SECTION. 7. Section 30685 is added to the Streets and Highways Code, to read:

30685. The commission shall transfer fifteen million dollars (\$15,000,000) to the Toll Bridge Seismic Retrofit Account in the State Transportation Fund from funds in the Vincent Thomas Toll Bridge Revenue Account.

SECTION. 8. Section 30796.7 of the Streets and Highways Code is amended to read:

30796.7 (a) Notwithstanding any other provision of law, the San Diego Association of Governments may impose a toll on vehicles crossing the San Diego-Coronado Bridge. The toll shall be established by the association after conducting at least one public hearing.

(b) The authority of the commission relative to tolls on the bridge is hereby transferred to the San Diego Association of Governments. All tolls established by the commission shall remain in effect until June 30, 1995, unless changed by the San Diego Association of Governments. Thereafter, all tolls on the bridge shall be at the rates established by the San Diego Association of Governments, except that at no time shall the rate of toll for Class 1 vehicles exceed one dollar and fifty cents (\$1.50) per vehicle.

(c) (1) The revenues from any tolls imposed on the bridge shall be used first for expenses related to the collection of tolls and operation of the bridge, including, but not limited to, reimbursement for any operating ~~and maintenance~~ costs and, second, for improvements to the bridge and its approaches. Tolls shall be established at an amount which will generate revenue sufficient to meet the requirements set forth in this paragraph, as determined by the department. Maintenance of the bridge shall be funded by the state pursuant to Section 188.4.

(2) The revenues from any tolls imposed on the bridge may also be used for costs incurred by the San Diego Association of Governments in administering this section and for any of the following:

(a) Transportation services that either increase the capacity of the bridge and its approaches or reduce the demand for travel in the transportation corridor that includes the bridge.

(b) Alternative forms of transportation, within the transportation corridor that includes the bridge, that reduce congestion and air pollution, including, but not limited to, ferry service and public transit.

(c) Capital improvements and related expenditures within the transportation corridor for construction and maintenance of bikeways.

(d) For the purposes of this section, "transportation corridor" means the San Diego-Coronado Bridge and its approaches which extend from Route 5 in the City of San Diego to the North Island Naval Air Station via Route 282, and to the Naval Amphibious Base via Route 75 in the City of Coronado.

(e) All money deposited in the San Diego-Coronado Toll Bridge Revenue Fund prior to March 26, 1992, and not expended, encumbered, or programmed before January 1, 1994, is appropriated to the Controller for allocation to the San Diego Association of Governments for the purposes of paragraph (2) of subdivision (c).

(f) Not later than June 30, 1995, and not later than June 30 of every even-numbered year thereafter, the San Diego Association of Governments shall adopt an expenditure plan specifying the projects and programs that are to be funded with toll revenues, and shall submit copies of each plan to the Senate Committee on Transportation and the Assembly Committee on Transportation.

(g) If the San Diego Association of Governments imposes tolls pursuant to subdivision (a), it shall reimburse the department for costs incurred by the department in operating the bridge, collecting tolls, and performing other related services. The association and the department shall enter into an agreement which provides for the full reimbursement of the department for all operating ~~and maintenance~~ costs.

(h) The San Diego Association of Governments, not later than June 30, 1995, and not later than June 30 of each year thereafter, shall prepare an audit, to be funded solely with toll revenues, of all expenditures and revenue collected pursuant to this section. The first audit shall include all expenditures and revenue collected prior to January 1, 1995. A report of the audit shall be published and made available to the members of the San Diego Association of Governments, and to any member of the public who submits a written request therefor within 30 days upon receipt of the request.

SECTION 9. Section 30796.9 is added to the Streets and Highways Code, to read:

(a) The San Diego Association of Governments shall deposit thirty-three million dollars (\$33,000,000) in the Toll Bridge Seismic Retrofit Account in the State Transportation Fund.

SENATE BILL 60

(b) On or before January 1, 1998, the San Diego Association of Governments shall submit to the Legislature and the department a financial plan for the transfer of thirty-three million dollars (\$33,000,000) on or before July 1, 2000, to the Toll Bridge Seismic Retrofit Account in the State Transportation Fund.

(c) Maintenance of the San Diego-Coronado Bridge shall be funded by the state pursuant to Section 188.4.

SECTION 10. Chapter 4.5 (commencing with Section 31000) is added to Division 17 of the Streets and Highways Code, to read:

CHAPTER 4.5. SEISMIC RETROFIT SURCHARGE

31000. The following definitions apply for purposes of this chapter:

(a) "Account" means the Toll Bridge Seismic Retrofit Account created pursuant to Section 188.10.

(b) "Amenities" means any of the following:

- . (1) A cable suspension bridge.
- (2) A bicycle facility.
- . (3) A transbay terminal.

(c) "Authority" means the Bay Area Toll Authority.

(d) "Bay area bridges" means the state-owned toll bridges in the region within the area of the jurisdiction of the Metropolitan Transportation Commission.

(e) "Department" means the Department of Transportation.

(f) "Seismic retrofit" means all work completed by the department on the bay area bridges relating to the planning, design, and construction of improvements to, or replacement of, those bridges for the purpose of withstanding seismic forces, including, but not limited to, any environmental or traffic mitigation necessary for that work.

(g) "Surcharge" means the seismic retrofit surcharge imposed pursuant to Section 31010.

31010.(a) There is hereby imposed a seismic retrofit surcharge equal to one dollar (\$1) per vehicle for passage on the bay area bridges, except for vehicles that are authorized toll-free passage on these bridges.

(b) This section shall remain in effect only until the date that the Secretary of State receives the notice required under subdivision (b) of Section 31050, or until January 1, 2008, whichever occurs first, and as of that date is repealed.

31015 (a) Revenues generated from the surcharge shall not exceed nine hundred seven million dollars \$907,000,000, unless any of the following occurs:

(1) After completing 30 percent of the design, and after completion of a cost estimate by the department, the authority selects a design that costs more than the cost of a single tower cable suspension bridge selected by the department.

(2) The authority requests funding for the replacement or relocation of the transbay bus terminal in the City and County of San Francisco.

(3) The authority requests funding for a bicycle or pedestrian access that is to be added to the new bridge.

(b) If the authority does any of the things listed in paragraphs (1) to (3), inclusive, of subdivision (a), the local share of the project costs shall be increased by an amount equal to any additional costs that are incurred as a result of the authority's decision.

SENATE BILL 60

(c) The department shall include the amenities requested by the authority only if sufficient funds generated by the seismic retrofit surcharge are made available to fully pay for those amenities.

31020. Revenue generated from the surcharge shall be deposited in the account.

31050. (a) The department shall determine the date when all of the following have occurred:

(1) Sufficient funds, not exceeding nine hundred seven million dollars (\$907,000,000), have been generated for the completion of seismic retrofit and the replacement of the San Francisco-Oakland Bay Bridge.

(2) Sufficient funds have been generated to pay for any costs added under Section 31015.

(b) The department shall notify the Secretary of State of the date determined under subdivision (a), immediately upon making that determination.

(c) The notice required under subdivision (b) shall state that it is being made pursuant to this section for the purposes of Section 31010.

SECTION 11. Notwithstanding Section 17610 of the Government Code, if the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code. If the statewide cost of the claim for reimbursement does not exceed one million dollars (\$1,000,000), reimbursement shall be made from the State Mandates Claims Fund.

Notwithstanding Section 17580 of the Government Code, unless otherwise specified, the provisions of this act shall become operative on the same date that the act takes effect pursuant to the California Constitution.

SECTION 12 (a) Notwithstanding any other provision of law, two hundred million dollars \$200,000,000 is hereby appropriated from the State Highway Account in the State Transportation Fund to the Department of Transportation for the purposes of the state-local partnership program described in Chapter 16 (commencing with Section 2600) of Division 3 of the Streets and Highways Code for expenditure in the 1998-99 fiscal year.

(b) Notwithstanding any other provision of law, of the amount appropriated in subdivision (a), the Department of Transportation shall allocate two hundred fifty thousand dollars (\$250,000) to any county as of January 1, 1997, with no less than 350 state highway miles and no more than 360 state highway miles to be used for the construction of transportation projects within the county.

please distribute
for TODAY'S meeting
thanks.

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DATE: JUNE 10, 1998

TO: CHAIR MARY KING & all members

Bay Bridge Design Task Force MTC

FROM: Noel Tebo

SUBJECT: Bridge Design

FAX#: 570-464-7848 NO OF PAGES (Includes cover sheet): 2

COMMENTS:

Please include comments for
TODAY'S TASK Force Meeting

If you do not receive all pages, please call: 650 855-6003

June 9, 1998

Chair Mary King and members of the Bay Bridge Design Task Force
MTC, MetroCenter
101 Eighth St.
Oakland, CA 94607

fax: 510-464-7848

Re: Bay Bridge Design

Dear Representatives:

It's so frustrating to write letters and attend public meetings commenting on the details of this bridge design and still be left with the sinking feeling that our public comments are falling on deaf ears.

This is a crucial long-lasting decision that impacts Bay Area transportation for the next couple of generations. Yet the press and some politicians (not you, of course) seem to focus exclusively on the aesthetics of how close a pier should look to be to Treasure Island. Frankly, it's not all that important and this nonsense doesn't generate a lot of confidence in the decision process.

In my humble opinion, these following points are much more important:

1. The Bridge is already overcrowded during peak periods and just a replacement structure for cars does not provide the improvements we need to cope with future transport needs.

a. The new portion must not degrade the capability of the entire bridge to handle rail traffic! Why is this such a difficult concept? The entire bridge handled the heavy, old Key System commuter trains. There are various proposals to add light rail, etc. that offer a better way of handling future traffic. Please do not build a bridge that does not allow the reinstatement of such commuter systems. The renaissance of light rail systems and the maxed out capacity of BART are pretty well known. This option must be included for the next generation of transport or our kids will chastise us for being so short-sighted.

b. The bridge needs to include bicycle paths. The added cost is minimal; the benefits of such an environmentally friendly solution to traffic & pollution should be obvious. Why don't the staff & experts "get it"? Bicycle commuting grows every year; new electric-powered bikes might spawn a mini-revolution in commuting & the lowered path seems even better. Please don't listen to naysayers.

2. The TransBay Terminal with 2 ramps must be retained. With well-connected real estate developers publicly salivating over this valuable property, is it any wonder that we have no trust in self-serving political positions and biased consultant studies. I urge you to consider the long-term public transportation good as the most important criteria, not short-term costs.

Nobody really knows with certainty what the future holds for Bay Area transportation. But it's a good guess that we'll have more people and more traffic than we can handle today. Providing the most flexible capability to handle future needs is the best decision you can make.

Sincerely,



Noel Tebo
5803 Tompkins Drive
San Jose, CA 95129

Secretary, Modern Transit Society

408-446-1030



**METROPOLITAN
TRANSPORTATION
COMMISSION**

Joseph P. Bort MetroCenter
101 Eighth Street
Oakland, CA 94607-4700
Tel: 510.464.7700
TDD/TTY: 510.464.7769
Fax: 510.464.7848

Memorandum

TO: Bay Bridge Design Task Force

DATE: June 4, 1998

FR: Executive Director

RE: Engineering and Design Advisory Panel (EDAP) Recommendations

At its meetings on April 15 and May 29, EDAP approved the following four recommendations for your consideration regarding the design of the new eastern span of the Bay Bridge:

1. The new eastern span should be a single-tower self-anchored suspension bridge.
2. The causeway section of the new eastern span should be constructed of either concrete with a variable depth profile or steel with a constant depth profile, with a minimum span length of 525 feet except near the Yerba Buena Island transition and approaching the Oakland touchdown.
3. The new eastern span should have a single bicycle/pedestrian path on the south side of the eastbound deck, with a width and height (in relation to the deck) adequate to ensure the safety and comfort of path users and protect the views of motorists.
4. The pile caps for the piers supporting the causeway section should be placed above water, but with careful attention to the design.

Discussion

EDAP's major recommendation is that the new eastern span should have a single-tower self-anchored suspension long span over the shipping channel adjacent to Yerba Buena Island (see renderings on pp. 2-3 of the attached 30% design report). EDAP selected the suspension design instead of a single-tower cable-stayed long span that had also been developed to the 30% design stage. Many members of EDAP commented that both the suspension and cable-stayed designs had been significantly improved and refined since the design teams began work in January. EDAP's recommendation of the single-tower self-anchored suspension design was based on the following factors:

- The suspension design links the new eastern span to the Bay Area's rich tradition of suspension bridges: the Golden Gate Bridge, Bay Bridge western spans, and new Carquinez Bridge.

- The suspension design is asymmetrical, with the main span (east of the tower) about twice as long as the back span (west of the tower). This asymmetry is not only visually appealing, but it shifts the tower west to a better foundation further up the rock shelf near Yerba Buena Island and results in a shipping channel with more than 1,000 feet of horizontal clearance.
- Both the single-tower and self-anchored features of the new eastern suspension span represent important innovations in bridge design. The tower, especially, is not really a single tower but four vertical pylons linked with "sacrificial" fuses that are designed to protect the load-bearing pylons during an earthquake.

EDAP's second recommendation concerns the appearance and construction materials for the causeway portion of the bridge from the suspended long span to the Oakland shore. EDAP's preference is that the span length (distance between piers) for most of the causeway be at least 525 feet, which would minimize the number of supporting piers and provide a more graceful profile for the causeway. According to the TY Lin design team, this span length can only be accomplished with a haunched (arch-like profile) concrete deck or a constant depth (level profile) steel deck. Although Caltrans estimates that the steel deck would cost significantly more than the concrete deck, EDAP recommended that both decks be designed and bid, with the winning low bid determining the construction materials to be used.

The third recommendation suggests that a single bicycle/pedestrian path be located on the south side of the eastbound span. The design team also had developed a proposal for two paths, one each for bicyclists and pedestrians, on the south and north sides of the bridge. EDAP rejected the two path option because (a) the path on the north side of the westbound span heading uphill from Oakland to the island could interfere with motorists' views, and (b) for security's sake, it would be better to concentrate what may be, on many days, a modest number of path users on one facility, instead of spreading them over two. Caltrans' bicycle and pedestrian advisory committee requested that EDAP recommend either two paths each 10 feet wide and 1 foot above deck level, or one path 15 feet wide and also 1 foot above deck level. EDAP agreed to recommend one path, but deferred to further study the exact horizontal and vertical dimensions of the path.

EDAP's fourth recommendation for the 30% design phase refines one of its earlier recommendations that the Commission had approved last July as follows: "For the causeway section, particular attention should be paid to the design of the supporting pier as it enters the water, including the possibility of submerging the pile cap below water." After further analysis by the TY Lin design team, EDAP recommends for cost, safety, and other reasons that the pile caps should be placed above water, as is the standard practice in bridge design.

Finally, although EDAP did not explicitly recommend how the Task Force should provide continuing oversight for the remaining design phase, the panel did identify a number of key issues that warrant close scrutiny in the next phase of design. MTC staff intends to formulate a further recommendation for the Task Force to consider at your June 22 meeting that would specifically enumerate these issues including, but not limited to, the Yerba Buena Island transition and possible replacement ramps and the design of the causeway section of the bridge and the Oakland touchdown to address concerns expressed by the City of Oakland and others.

Relationship to Amenities Budget

Pursuant to SB 60 (Kopp), signed into law by Governor Wilson in August 1997, the \$1 toll surcharge that took effect January 1, 1998 will remain in force for approximately eight years to pay the Bay Area's funding share of the entire toll bridge seismic retrofit program. Under the law, MTC (acting as the Bay Area Toll Authority, or BATA) is authorized to extend the toll surcharge for an additional two years to pay for the following "amenities" for the Bay Bridge eastern span project: a cable-supported long span, bicycle/pedestrian access on the new span, and replacement/relocation of the Transbay Terminal. The two-year toll surcharge extension would generate \$230 million. In addition, the law defines the baseline cost of the new eastern span as \$1.285 billion, which includes \$80 million for a cable-supported main span. Thus, the total budget for Bay Bridge "amenities" is \$310 million (\$230 million + \$80 million).

EDAP recommends a single-tower self-anchored suspension long span. Caltrans estimates that this suspension design with a haunched concrete causeway will cost \$156 million more than the baseline bridge. If architectural lighting is included as proposed by the design team, that cost will increase by \$15 million to \$171 million. EDAP also recommends designing and bidding an alternative steel constant depth causeway that Caltrans estimates would cost \$75 million more than the concrete causeway. Moreover, this parallel causeway design process would entail added project development costs, which Caltrans will be estimating and reporting to the Task Force at your meeting on June 22. At this point, however, since EDAP's recommendation contemplates a cost competition between the lower estimated cost concrete and higher estimated cost steel causeways in the bidding process, we propose using the \$171 million cost for the purposes of BATA's amenities budget.

EDAP also recommends a single pedestrian/bicycle path on the south side of the eastbound deck. Caltrans estimates that a single 12 foot path would cost \$33 million. Prior to your June 22 meeting, Caltrans and its bicycle and pedestrian advisory committee will be investigating path widths up to 15 feet, which could increase the cost to approximately \$50 million. Pending the outcome of this further design work to determine the exact horizontal and vertical dimensions of the path, we will use the upper bound of that range (\$50 million) for the purposes of BATA's amenities budget.

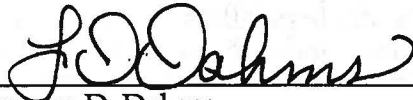
Thus, EDAP's recommendations -- based on current cost estimates which are subject to some change before your June 22 meeting -- would result in the following impact on the amenities budget:

Total Amenities Budget	\$310 million
Suspended long span	(171 million)
Bicycle/pedestrian path	(50 million)
Subtotal added costs	(221 million)
Remaining Balance	\$ 89 million

Ultimately, BATA must decide which of EDAP's recommendations to support and whether to extend the toll surcharge long enough to finance the incremental costs. In doing so it must also consider whether to invest in a relocated or replacement Transbay Terminal. Finally, we need to acknowledge that the cost of the baseline bridge is now expected to be higher than when SB 60 was passed. For example, new information about earthquake ground motions at the site alone could add \$90 million to the baseline cost. SB 60 contemplated that such additional costs might develop and instructed Caltrans to return to the Legislature for additional funding authorization in that event.

June 4, 1998
Page 4

All of these matters will be reviewed with the Bridge Design Task Force when it meets June 10 and June 22 to formulate recommendations for BATA action on June 24.



Lawrence D. Dahms

LDD/SH/lw/Misc/BB/EDAP

Bay Bridge Design Task Force

June 10, 1998 - 1:00 p.m.

Public Sign-in Sheet

NAME	REPRESENTING	ADDRESS
11. MICHAEL KATZ	BICYCLE-FRIENDLY BERKELEY COALITION	(ON MAILING LIST)
12. T.Y. Lin	ED Conits	
13. Shirley Dear	Mayor, City of Berkeley	2180 Milvia ^{Box 4704}
14. George Lythell	Oakland Landmark Preservation Ad Board	
15. Phil Allen	myself	886 Jones St Berkeley CA 94710
16. Richard Harris	EBMUD	
17. Robert Prott	Ca Bicycle Advocates	5829 Ayala Ave Oakland 94609 C PL 658 4268
18. H. E. Christian Peoples	AC Transit	1600 Franklin St Oakland CA 94612 510-891-7151
19. Douglas Landau	Cyclists	408 345 3278
20. Richard MLYNARK	Transit Alliance	436 Alvarado St
21. PAUL GULBENKIAN	P.S.I.	430 Turk # 812 94114
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P.O. BOX 55 HAYWARD, CA 94543		

Bay Bridge Design Task Force

June 10, 1998 - 1:00 p.m.

Public Sign-in Sheet

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1. Mike Daley	Sierra Club SF Bay Chapter	2530 San Pablo Berkeley 94702
2. SOL STRAND	People on the Bus	555 Pierce ALBANY
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4.		
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7.		
8.		
9.		
10.		

Bay Bridge Design Task Force

June 10, 1998 - 1:00 p.m.

Public Sign-in Sheet

NAME	REPRESENTING	ADDRESS
1. DAVID HOLMAN	CA CEMENT PROMOTION COUNCIL	263 W. EL PINTADO RD. DANVILLE, CA 94526
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3. Derek Shuman		1558 62 nd St Emeryville 94601
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6. David Favello	transportation interests for equal access	2677 Oak Rd Ste 202 Walnut Creek CA 94596
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CITY OF OAKLAND



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Public Works Agency

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Supervisor Mary King
Chair, Bay Bridge Design Task Force
Metropolitan Transportation Commission
101 Eighth Street
Oakland, CA 94607-4700

June 9, 1998

Dear Supervisor King,

I am writing regarding Oakland's position on three key issues with the new Bay Bridge design: 1) the design of the viaduct portion of the bridge; 2) designing the bridge to accommodate future rail; and 3) the bicycle/pedestrian lane(s).

On numerous occasions, during the bridge design process, the City of Oakland has expressed its desire that the new bridge be a world class design and establish a sense of gateway and place for the East Bay. However, the designs to date have centered on the "main span" at Yerba Buena Island, only 15 % of the overall span of the bridge, leaving 85% (the viaduct) of the bridge to look like a freeway overpass. In our opinion, it is not reasonable to approve of a bridge design without addressing the design of viaduct section, especially when the design features of the viaduct have not been given serious consideration by the designers. We think the viaduct section can be made much more architecturally significant and bridge-like than the current design and that to do anything less would be a disservice to the Bay Area.

In addition, it is our understanding is that the designers have investigated including provisions for future light rail on the bridge that would remove one or more traffic lanes from the bridge. It is questionable whether the public would agree with this solution. In addition, we believe an analysis of heavy rail on the bridge should be done to keep our options open for the future. We continue to request that this analysis be done.

The City of Oakland supports the inclusion of a bicycle/pedestrian lane(s) on the bridge, however, further design should be done to ensure that bicycles, pedestrians, in-line skaters, and other users could safely be accommodated in the 15 foot area as is now proposed.

Caltrans is required to mitigate the demolition of the existing eastern span of the historic Bay Bridge. Clearly the current eastern span has more bridge-like features than the proposed new span and in our opinion does not mitigate or replace the loss of the design features of the historic bridge.

The City of Oakland believes that there are viable design alternatives that could be included in the viaduct design that would be cost effective and would add to the "signature" and the world class design mandate. We ask that the aforementioned issues be addressed and that alternative designs be developed and presented to the Bay Bridge Design Task Force before the final decision on the bridge design is made.

Thank you for your consideration.



TERRY E. ROBERTS
Director, Public Works Agency

c: **Bay Bridge Design Task Force**
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Elihu Harris
Tom Hsieh
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***Note:** The Engineering and Design Advisory Panel of the Bay Bridge Design Task Force is comprised of representatives from the following organizations (in some instances serving on more than one panel):*

- American Institute of Architects
- American Society of Civil Engineers
- Bay Conservation and Development Commission Design Review Board
- Bay Conservation and Development Commission Engineering Criteria Review Board
- Caltrans Peer Review Panel
- Caltrans San Francisco-Oakland Bay Bridge Review Panel
- Caltrans Seismic Advisory Board
- Structural Engineers Association of Northern California